

VII. *Descriptions of new species of Hemiptera, collected by Dr. STOLICZKA during the Forsyth Expedition to Kashgar in 1873—74.* By W. L. DISTANT.

[Read April 2nd, 1879.]

THE following descriptions will hereafter appear at somewhat greater length and with more comparative detail and figures in the general work on the scientific results of the expedition, now in course of publication at Calcutta. I cannot, however, allow this opportunity to pass without recording my sense of the obligation I am under to Dr. O. M. Reuter and Dr. Sahlberg for very valuable and cheerfully-accorded assistance in determination of some species belonging to the obscure groups which they have made their especial study.

Dalpada confusa, n. sp.

Luteous, thickly covered with green punctures. Head emarginate in front with the sides reflexed, and some small indistinct ochreous markings at base. Antennæ pitchy, each joint luteous at base, basal and apical joints smallest, 2nd shorter than 3rd, 3rd and 4th subequal. Rostrum just passing posterior coxæ, with the tip pitchy. Pronotum somewhat transversely gibbous at base in a line with lateral angles, after which it is abruptly deflexed towards head, lateral angles prominent, subacute, lateral margins denticulated for about half their length from apex; the punctuation is very dense along the lateral margins and at pronotal angles. Scutellum somewhat gibbous at base, deflexed towards apex, where it is more sparingly punctured. Corium with a faint impunctate longitudinal line on disc, extending from base to about two-thirds its length, rather widened at apex. Membrane extending beyond apex of abdomen, pale fuscous with the nervures dark brown for half the length from base, followed by a row of four brown spots and a marginal row of six spots of the same colour, the two outer ones being long and linear. Underside of body luteous, with the pectoral and abdominal margins broadly punctured with green, sparingly on

abdomen, and more densely on prosternum ; legs luteous, thickly spotted with brown ; tarsi luteous, apical joint pitchy.

♂. Long. 14 mill. ; lat. pronot. ang. $6\frac{1}{2}$ mill.

♀. Long. 15 to 16 mill. ; lat. pronot. ang. $7\frac{1}{2}$ mill.

Murree.

Palomena Reuteri, n. sp.

♂. Green ; head, anterior border of pronotum, basal half of scutellum and membrane, bronzy. Head obscurely rugulose, very thickly and strongly punctured with black, central lobe slightly shorter than the lateral ones. Rostrum luteous, with the tip black. Antennæ luteous, apical joint somewhat fuscous, 3rd joint distinctly longer than the 2nd, rather shorter than the 4th, 5th longest. Pronotum obscurely rugulose, very thickly and strongly punctured with black, with two slightly waved, lateral, linear impunctate foveæ situated a little behind the anterior margin ; lateral angles somewhat prominent and rounded. Scutellum thickly covered with deep black punctures, slightly rugulose at base. Corium thickly and deeply punctured with black. Abdomen above black, thickly and finely punctured with the connexivum luteous, punctured with black. Body beneath pale luteous, slightly clouded with greenish. Legs greenish, tarsi luteous.

♀. Second joint of antennæ distinctly longer than the 3rd, 2nd and 4th subequal. Abdomen beneath, with some irregular obscure black markings.

Long. 11 to 12 mill ; exp. pronot. ang. 6 to 7 mill.

Murree.

Menida distincta, n. sp.

Luteous, covered with strong greenish-black punctures. Head luteous, with the lateral margins and four longitudinal furrowed punctured lines greenish-black. These lines are much more distinct on the ante-ocular portion of the head. Eyes dull ochreous. Antennæ pilose, with the 2nd joint shorter than the 3rd, 4th and 5th subequal, rather longer than 3rd ; first 3 joints luteous, apex of the 1st, and apical half of the 3rd, black, 3rd and 4th joints black, narrowly luteous at base. Rostrum luteous, apical joints pitchy. Pronotum with an anterior submarginal line of greenish-black punctures, and two irregular transverse ocellated punctured marks of the same colour on anterior portion of the disc. Scutellum with a large

central subbasal greenish-black spot, and two small and somewhat indistinct ones of the same colour situated on the lateral margins a little before apex. Membrane transparent, whitish. Abdomen above black, connexivum luteous, spotted with black. Underside of body and legs luteous, sparingly and distinctly punctured with black. Tarsi pitchy.

Long. 6 mill.

Murree, Sind Valley.

Eurydema Wilkinsi, Osch. in litt.

Pale luteous, somewhat thickly and coarsely punctured; head with the anterior portion of the submarginal lateral borders, and a large triangular marking at base; pronotum with two large discal subquadrate linear markings, elongated exteriorly; scutellum with the base and two central forked lines extending therefrom to about middle, and two spots on lateral margins a little before apex; corium with two claval streaks; a linear spot on centre of outer margin; a transverse-waved fascia, extending from base of membrane for two-thirds across corium, and a rounded subapical spot, shining green. Abdomen above luteous, apical segment black, connexivum with a row of large green spots. Underside of body pale luteous. Abdomen with a marginal row of spots situated on the outer edge of each segmental suture, and a submarginal row of transverse slightly-waved linear markings, situated on centre of each segment, greenish-black. Sternum with some irregular markings of the same colour. Legs pale luteous, streaked with greenish-black, and femora obscurely annulated with the same colour near apex. Antennae black, 2nd joint about as long as 1st and 3rd together, 4th somewhat dilated, about equal in length to 5th. Rostrum luteous, pitchy at base and apex.

Long. 7 mill.

Yangihissar.

Dr. Reuter informs me that this species has been sent under the above unpublished name from Turkestan. I therefore conserve it. In most specimens the markings on the pronotum are not perfectly subquadrate, but disjointed; I have, however, thought it best to describe the specimen submitted to Dr. Reuter and returned as above.

Arocatus pilosulus, n. sp.

Testaceous, pilose. Head with the central portion

black. Antennæ black, pilose, 2nd joint rather the longest, 3rd and 4th subequal. Rostrum pitchy. Pronotum obscurely punctured, distinctly rugulose on posterior portion; anterior portion crossed with a transverse black submarginal band, and an obscure pitchy band on posterior border. Scutellum pitchy, with the tip red, and with two large round foveæ at base. Corium suffused with dull-pitchy shadings. Membrane pitchy opaque, outer border pale transparent. Underside of body testaceous, strongly suffused with pitchy shadings. Sternum with a submarginal row of three black spots, placed one on prosternum, one on mesosternum, and one on metasternum. Legs pitchy, pilose. The corium is more densely pilose than other parts of the upper surface.

Long. 6 mill.

Murree.

Phytocoris Stoliczkanus, n. sp.

Uniform pale ochraceous. Head with a V-shaped mark, consisting of small transverse striæ, commencing from near base of antennæ. First joint of antennæ almost as long as head and pronotum together. Pronotum with two slightly-raised transverse callosities extending across and occupying the anterior border. Scutellum with the base somewhat raised and gibbous, a waved transverse cordate line near base, and a faint pale longitudinal central line near apex. Hemelytra sparingly clothed with a few minute blackish hairs. Membrane with bright prismatic reflexions.

Long. 6 mill.

Murree, Jhelam Valley, Sind Valley.

Calocoris Stoliczkanus, n. sp.

Ochreous clouded with brown, and sparingly clothed with pale yellowish pile. Antennæ brownish, 2nd, 3rd and 4th joints with the apices pitchy. First joint robust, 2nd somewhat suddenly thickened towards apex, 3rd and 4th very slender, 4th not much more than half the length of the 3rd. Cuneus somewhat paler in colour than corium, brownish and pilose at base, and with a small pitchy spot at apex. Membrane pale fuscous clouded with brown. Underside pale obscure ochreous, clothed with fine pale yellow pile, and a somewhat obscure stigmatal row of small brown spots. Legs mutilated. The pronotum is

faintly angulose, and the scutellum somewhat more plainly strigose.

Long. 8 mill.

Murree.

I have placed this species in the genus *Calocoris*, though as Dr. Reuter writes me, after his own examination, "*Calocoris*, vel n. gen."

Calocoris Forsythi, n. sp.

Brownish testaceous. Antennæ with the 1st joint not quite so long as head and pronotum, 2nd slightly and gradually thickened towards apex, 3rd pale luteous at base, 4th wanting. Head with a deep central longitudinal incision between the eyes. Pronotum, rugulose faintly anteriorly and more distinctly towards posterior border. Hemelytra slightly pilose, somewhat paler towards costal margin, and with extreme outer margin somewhat obscure pitchy. Membrane pale fuscous, somewhat clouded. Scutellum obscurely and transversely strigose. Underside of body castaneous. Fore legs ochraceous, tibiæ with a longitudinal row of small brownish spots. Other legs wanting.

Long. 7 mill.

Murree.

Reduvius (Harpiscus) Reuteri, n. sp.

Black, shining, trochanters and bases of femora sanguineous.

Allied to *R. morio*, Kol. Dr. Reuter has kindly compared the two species for me, and writes:—"R. (*Harpisco*) *morioni*, colore similis, sed major et in omnibus latior, magis nitidus, pedibus pilis exsertis longis destitutis, capite pronoti lobo postico tantum paullo longiore, trochanteribus basi que ipsa femorum rufis divergens. *Obs.*—Gula nigra, ut in *morione*."

Long. 20 mill.

Sind Valley.

Gerris (Limnotrechus) Sahlbergi, n. sp.

Head thickly covered with olivaceous pubescence, with a small black spot on vertex. Antennæ ochraceous, 1st joint longest, 2nd and 3rd shortest and subequal, 4th rather longer than 3rd, thickly covered with greyish pile. Pronotum ochraceous, pubescent, anterior third,

lateral borders, and a central longitudinal line olivaceous; the last is testaceous on anterior portion of pronotum. Hemelytra brownish testaceous, with the nervures olivaceous. Underside of body covered with greyish pile, except lateral borders, apex and central portion of abdomen, which are ochraceous. Legs ochraceous, fore femora with an outer longitudinal black fascia.

Long. 10 mill.

Neighbourhood of Leh.

Halobates (?) *orientalis*, n. sp.

Brownish ochraceous, finely pilose. Antennæ with the 1st joint curved, robust and about the length of head and pronotum together; remaining joints more slender, 2nd and 3rd subequal, 4th a little shorter than 3rd. Pronotum with a central pale longitudinal line and a large rounded fovea on posterior portion of disc. The rostrum is 5-jointed. The first two joints are very robust, somewhat fused together, the 2nd minute and much shorter than the 1st, the 3rd much the longest, rather less robust than 1st and 2nd, 4th small, slender and black, 5th ochreous, very slender and hair-like, rather shorter than 4th. Sternum clothed with greyish pile.

The eyes are large, semi-globular and castaneous, situated at base of lateral margins of head. The pronotum is about the length of the head, but broader, truncate in front and rounded behind; mesonotum and metanotum hardly distinguishable, much longer than pronotum, and gradually and regularly widened posteriorly. Legs ochreous, fore femora much thickened.

Long. 7 to 8 mill.

Jhelam Valley.

I have placed this species provisionally in the genus *Halobates*, to which it has great affinity; its anatomical peculiarities and sexual appendages will hereafter be figured.